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Ans

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WONG, ALBERT KANG

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 08/26/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/586,648

Applicant(s)

SNIDER ET AL.

Examiner

Albert K Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 6, 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 83-86 and 105-138 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 83-86, 105-119, 121-134, and 136-138 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4.7.8</u> | 6) <input type="checkbox"/> Other: _____ |

1. This Office action is in response to the application filed June 1, 2000. After entry of the preliminary amendments filed April 8, 2002, December 20, 2002, and September 12, 2003 claims 83-138 are pending. The Terminal disclaimer filed September 12, 2003 has been processed.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 113-114 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification as filed fails to teach the step of spacing the setting tool from the reader device by a selected distance or controlling a packer setting tool comprising an inflatable packer element.

4. Claims 83-86, 105-119, 121-134, and 136-138 of this application conflict with claims of Application No. 10/323,536. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

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harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 83-86, 105-119, 121-134, and 136-138 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/323,536. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences are considered to be obvious variations of the same inventive concept.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Regarding claim 83, this claim is obvious in view of claim 144 of the co-pending application. Both claims recite the location of a plurality of rd devices that transmit a signal that is used to determine depth. The signal is decoded by a reader and used to activate a tool when the appropriate code is read. While the storing of a code and the comparing of a code is not recited in claim 83, these limitations would have been obvious because they would be necessary to the system recited in claim 144 to work.

Regarding claim 84, well casing is considered completion tubing.

Regarding claim 85, claim 144 locates the radio devices on the couplings which it the equivalent of a joint.

Regarding claim 86, a perforating gun is a conventional downhole tool. It would have been obvious to control any conventional downhole tool.

Regarding claim 105, this claim recites a method of transporting a tool and reader through a well with a plurality of radio identification devices each with a unique signal to indicate id and depth. A tool is controlled in response to the reader locating one of the radio identification devices at an appropriate depth. Claim 137 of application 10/323,536 recites essentially the same limitations. The claim recites a process tool and thus is more limiting than the claim in the instant application. Further, while the language concerning the depth is different, the function is identical. Both claims recite the transmission of a signal that is interpreted by the reader to determine both depth and id of the radio identification device.

Regarding claim 106, this claim is an obvious variation of claim 144 of application 10/323,536 because the scope of the claim is broader than claim 144. Claim 106 recites a tool and tubular elements while claim 144 recites the narrower limitation of a process tool and a well casing. Thus, claim 106 is anticipated by claim 144. Anticipation has been held to epitomize obviousness. The recitation of well logs is not considered to be different. It is presumed that the reader is looking for a particular signal response from a particular radio id device that corresponds to the desired depth wherein the depth is determined by the well log.

Regarding claim 107, claim 144 recites the claimed well casing.

Regarding claim 108, claim 144 recites the sending of a control signal from the reader to the tool.

Regarding claims 109-110, while claim 144 does not teach the dynamic or static control step, it would have been obvious to stop the tool or actuate the tool while it is still moving. The

selection of the desired operation would be dependent on the particular tool used and the desired level of accuracy. If the tool were moving rapidly, it would be desired to stop the tool for precise actuation.

Regarding claim 111, it would have been obvious to actuate any tool suitable for a well environment. A perforation tool is conventional in a well to allow oil to flow through the casing.

Regarding claim 112, it is conventional to actuate a perforation tool via detonation. It would have been obvious to use conventional techniques to actuate conventional tools.

Regarding claims 113-114, packers and bridge plugs are conventional tools in a wellbore environment. It would have been obvious to actuate any conventional tool in a wellbore because the purpose of the invention is actuate tools via radio frequency control and thus, would not be limited to any particular tool.

Regarding claim 115, it is conventional to lower tools into a well via a cable. When a cable is used the weight of the tool (gravity) is used to move the tool down the borehole. It would have been obvious to use conventional techniques to transport a tool. Also see claim 149

Regarding claim 116, see claim 147.

Regarding claim 117, since the recitation of a perforation tools has been shown in claim 111 to be obvious, the operation of a perforation process would also be obvious. A perforation tool is obviously used for a perforation process.

Regarding claim 118, the tool and the reader are either integrated or spaced apart. It would have been obvious to space the tool from the reader to prevent the tool from interfering with the reader or to prevent the reader from accidentally setting off the tool. Also, see claim 118 of the co-pending application.

Regarding claim 119, it would have been obvious to control more than one tool since one is only using multiple items to achieve the same purpose.

Regarding claim 121, see claim 87 of the co-pending application. While the base claims are different in scope, it would have been obvious to add this feature to enable bi-directional communication.

Regarding claim 122, a combination tool is considered to be multiple tools. This has been addressed in claim 119.

Regarding claim 123, see claim 111. While the base claim is different in scope, it would have been obvious to use free falling as a means of transport that is related to gravity.

Regarding claim 124, claim 144 teaches the identification of depth via well logs. This is the equivalent of the step of establishing a record via transporting a reader. It is conventional to log a well by transporting a tool down a borehole. It would have been obvious to use conventional techniques for the same purpose.

Regarding claim 125, this claim is a broader version of claim 137 of the co-pending application. See above reasoning.

Regarding claim 126, this claim corresponds to claim 144 of the co-pending application. Although claim 144 does not a unique signal, it would have been obvious that for the system to identify each radio id device, the signal must be different.

Regarding claims 127-132, 134, and 136-137, these limitations have been addressed in above claims.

Regarding claim 133, a control circuit is inherent in a reader device with control functions.

Regarding claim 138, claim 144 recites that the radio id devices are located on casing couplings. A collar is a coupling that joins section of pipes via a coupling means.

Examiner's comments

7. This application is a Continuation in Part (CIP) of application 09/286,650 (now Patent 6,333,699) which was filed on April 6, 1999. Although the specification in the instant application is different from that of the parent, the subject matter from the parent is incorporated by reference as stated on page 13. The Examiner has determined that the subject matter in claims 83-86, 105-112, 115-116, 118, 121-122, 124-128, 130, and 132-138 are fully disclosed in application 09/286,650 and are thus entitled to the April 6, 1999 priority date. Claims 117, 119-120, 123, 129, and 131 are entitled to the filing date of this application (June 1, 2000). The claims listed below recite terms that are not used explicitly within Patent 6,333,699, however, after a careful reading of the entire specification and giving reasonable inferences, the Examiner is able to find sufficient support to enable the claims for the reasons stated below. The Examiner expresses his appreciation for the time and effort of Jack Ebel and Beth Weimer on May 17, 2004 in discussing the claims submitted in the amendment.

8. Claim 110 recites the step of stopping the tool proximate to the radio id device. While such exact terms are not used in Patent 6,333,699, there is sufficient teaching to support this limitation. Col. 1, lines 37-40 teach the need to accurately perforate a well in a zone that may be only a few feet. Col. 9, lines 3-6 and 29 teach that the reader is placed within inches and adjacent to the id device. Both teach, indirectly, the stopping of the tool proximate to the id devices. It is not possible to achieve such a desired result without stopping the tool.

9. Claims 112, 136, and 137 recite a charge and/or the detonation of the charge in a perforation tool. While this is not explicitly stated in Patent 6,333,699, the teaching of the perforation tool is sufficient to support these limitations since the function of a perforation tool involves detonation of a charge as shown by presently cited Patent 5,680,905. In particular, see col. 6, lines 59-64.

10. Claims 116 and 130 recite that the tool is transported via "gravity." Although the term is not explicitly used in Patent 6,333,699, there is sufficient teaching to support this limitation. In particular, col. 9, lines 28-30 teach that "the line 26 is used to lower the tool 24 into the hole, and to withdraw the tool." Col. 8, lines 17-18 teach that the line "support[s] the tool." Both passages indirectly teach that gravity moves the tool.

11. Claim 122 recites a combination tool for performing multiple operations. Although the term is not explicitly used in Patent 6,333,699, there is sufficient teaching to support this limitation. Col. 14, lines 6 teaches "the tool for perforating the casing or other operations in the pipe." Col. 10, lines 54-55 teaches another pipe operation as inspection for flaws. At a minimum the tool performs the operations of perforation and determining location.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert K Wong whose telephone number is 703-305-8884. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Albert K. Wong
August 5, 2004